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ABSTRACT

The purpose of the study was to obtain employment status information for students six months after graduation from high school, to compare the similarity of the students' responses to teachers' report of the students' employment status, and to determine if there were any variations in reports of employment status from one occupational field to another. The study was limited to 1974 vocational education graduates from 10 Arkansas high schools. Three hundred and thirty-three of the 441 target students replied to a questionnaire. By using the U.S. Office of Education's publication, "Vocational Education and Occupations," and the "Dictionary of Occupational Titles," a student's employment status was determined to be in the same, related, or a field unrelated to his high school training. Descriptive statistics, in numbers and percentages, present the employment status of students as reported by both the teachers and the students, and to show comparisons of teacher and student reports. It was concluded that the majority of the 1974 graduates were working in an occupation in the same field or one related to their training. A wide discrepancy was found between the teachers' and the students' reports of the students' employment status six months after graduation. Considerable variation was also found in reports of employment status from one occupational field to another. (Author/AJ)

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ED118920

Validation Report

Follow-Up of Vocational Graduates
State of Arkansas
1973-74

For

Arkansas Department of Education
Division of
Vocational, Technical, and Adult Education

VT-102-550

CE 006 484

By

Educational Planning and Evaluation Services
P. O. Box 609
Magnolia, Arkansas 71753

July 1, 1975

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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ABSTRACT

Six months after graduation each of the vocational education graduates in Arkansas must be followed up to determine their employment status. The employment status is related to the student's high school training and reported to the United States Office of Education. In Arkansas the high school vocational teachers are responsible for finding out the employment status of the graduates. It was felt that there was a need to validate the information received from teachers by collecting the information directly from the student.

The purpose of the study was (1) to obtain employment status information from students six months after graduation from high school, (2) to compare the similarity of the students' responses to teachers' report of the students' employment status, and (3) to determine if there are any variations in reports of employment status from one occupational field to another.

The study was limited to 1974 vocational education graduates from ten Arkansas high schools: Harrison, Marianna, Hot Springs, Searcy, and the six schools in Pulaski County Special School District: Sylvan Hills, Mills, Robinson, Oak Grove, Jacksonville, and McClellan.

The data from students were collected by means of a questionnaire survey using both mail and telephone to obtain replies. After field testing, the questionnaires were mailed to 441 target students. The target group were students who were reported by teachers on a follow-up to be working full time or unemployed. Replies were obtained from 333 students (76 percent of the sample.)

Using the employment information provided by the students, their jobs were given code numbers based on the Dictionary of Occupational Titles. Determination was made as to relatedness of the job to the student's occupational training. This determination was made by using the U.S. Office of Education publication Vocational Education and Occupations and the Dictionary of Occupational Titles. By using these publications, it was determined whether the students' employment was in the same, related, or non-related field to his high school training. After this was done, the results from the validation study were compared to the results of the statewide follow-up conducted through the teachers.

Descriptive statistics, in numbers and percentages, were used to present the employment status of students as reported by both the teachers and the students and to show comparisons of teacher and student reports.

The following are some of the findings resulting from the study.

Summary of Major Findings

1. The teachers reported that 55 percent of the 1974 vocational education graduates were working in the same field as the area in which they had high school training. Another 21 percent of the graduates were working in fields related to their training, the teachers reported.

2. When a consultant firm classified the employment status of students as reported by students themselves, it was found that 22 percent of the 1974 vocational education graduates were working in the same field as the area in which they had high school training. Another 37 percent were working in fields related to their training.

3. When the employment status of 1974 vocational education graduates as reported by teachers were compared with employment status as reported by students and classified by a consultant firm, it was found that there was exact agreement in 32 percent of the cases and partial agreement in an additional 23 percent of the cases. In 45 percent of the cases there was non-agreement.

4. In the 45 percent of the cases where teacher and student responses were in non-agreement, the following major discrepancies were noted.

   a. The teachers reported that 27 students were working full time and two students were unemployed. These same students were working part-time according to reports of students. This constituted 9 percent of the total group.

   b. The teachers reported that 22 students were working in the same field as their high school training. These same students were working in a field not related to their high school training according to the report of students and as classified by the consultant firm. This constituted 7 percent of the total group.

   c. The teachers reported that another 22 students were working in fields not related to their high school training. These same students were working in a field related to their high school training according to the reports of students and as classified by the consultant firm. This constitutes 7 percent of the total group.

5. The students' and teachers' responses in the Marianna School District had the highest rate (69 percent) of non-agreement while the students' and teachers' responses from Oak Grove High School had the smallest rate (25 percent) of non-agreement.

6. Of the 321 students studied, 116 or 36 percent had high school training in office occupations. Nearly 85 percent of all the students involved in the study had high school training in the fields of office occupations, trades and industries, and distributive education.

7. When the employment status of graduates as reported by teachers and students were compared and analyzed by occupational fields, it was found that:

   a. the highest rate of exact agreement responses (55 percent) was in the health occupation field. The lowest rate of exact agreement responses (25 percent) was in the trade and industry field.

   b. the highest rate of partial agreement responses (32 percent) was in the distributive education field. The lowest rate of partial agreement responses (14 percent) was in the agricultural field.

   c. the highest rate of non-agreement responses (67 percent) was in the home economics field. The lowest rate of non-agreement responses (33 percent) was in the distributive education and health occupations fields.

Conclusions

1. The majority of the 1974 vocational education graduates were working in an occupation in the same or a related field to the area in which they had high school training.

2. A wide discrepancy exists between the teacher's report and the student's report of the student's employment status six months after graduation from high school.

3. The discrepancy between the teacher's report and the student's report of the student's employment status cannot be wholly attributed to differences in ways the teachers and the consultants classified students' employment status as 22 percent of the students reported by teachers to be working full time were found to be working part-time or were unemployed.

4. The accuracy of the teacher reports of the employment status of the vocational graduates varied greatly among the schools participating in the study as indicated by the percentage of non-agreement between teacher and student's report.

5. The high school students in Arkansas primarily take vocational education training in three occupational fields: office occupations; trade and industries; and distributive education.

6. There is considerable variation in reports of employment status from one occupational field to another as the highest rate of non-agreement between students and teachers occurred in the home economics field (67 percent) while the lowest rate of non-agreement was in the distributive education field (33 percent).

Recommendations

1. It is recommended that definitions of relatedness between job and training be established and communicated to teachers so that a standard system of coding employment categories can be used by all persons involved in reporting student follow-up.

2. An alternative follow-up system might be to require teachers to contact student or parent and obtain the student's job title, employer, and brief description of work. This information could be submitted to a central agency who would determine the relatedness of the job to the training.

3. To encourage greater cooperation and higher rate of response, it is recommended that senior vocational students be told of the follow-up, its purpose, importance and expected date before they graduate from school.

4. If the teachers continue to submit data without student or parent contact, it is recommended that validation studies be conducted every three years.

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I. STATEMENT OF THE PROBLEM

In the State of Arkansas there were some 12,000 secondary and post-secondary vocational graduates for the fiscal year ending June 30, 1974. Six months after graduation each of these vocational graduates must be followed-up and the results tabulated and reported to the United States Office of Education. The follow-up report form is generated at the State level and is submitted to the vocational education teachers throughout the state. On the follow-up form the teacher indicates by code the employment status of each graduate six months after graduation. From the teacher report a computerized listing of the employment status of graduating seniors is made. There is a question among several states whether follow-up information should be collected from the teacher or directly from the student. The Arkansas Department of Education feels that the vocational teacher should be responsible for collecting follow-up information; however, it is felt that there is a need to validate the information received from the teachers.

II. PURPOSE OF STUDY

The purpose of this study was to obtain employment status information from students and to compare by occupational education codes the similarity of the teachers' and students' follow-up responses.

Specific questions to be answered by the study were as follows:

A. What was the employment status of the 1974 vocational graduate as of November 10, 1974 as reported by the student?

B. Do teachers report employment status of graduates differently than students report their employment status?

C. Are there any variations in reports of employment status from one occupational field to another?

III. SCOPE OF THE STUDY

The study was limited to the following target schools, Harrison, Marianna, Hot Springs, Searcy, and Pulaski County Special. Pulaski County Special School District consists of five schools in an area surrounding Little Rock. They are Sylvan Hills, Mills, Robinson, Oak Grove, Jacksonville, and McClellan High Schools.

From these target schools the 1974 graduating seniors were the target class on which the follow-up study was based. Target students were those who had graduated under one of six courses of vocational study: Office Occupations, Trade and Industrial Occupations, Distributive Education, Agriculture, Health Occupations, or Home Economics.

The study compared the employment status of students six months after graduation from high school as reported by the teacher and as reported by the student himself. The report will present an overall comparison of student and teacher responses for the total student group in all six training areas. Comparisons will also be shown for each training area to see if there are any variations in student and teacher reports of employment status from one occupational field to another.

IV. METHODS OF STUDY

The basic method used in conducting the study was the questionnaire survey technique. The target schools were selected for study by the Division of Vocational, Technical and Adult Education of the Arkansas Department of Education. Educational Planning and Evaluation Services of Magnolia, Arkansas was engaged to conduct the survey. A computer printout containing the names of all 1974 vocational graduates in each school was provided to the consultant firm. The printout listed the Office of Education code number of the graduate's course of study and a coded response made by the teacher indicating the student's employment status six months after he graduated. The following code system was used.

(1) Status unknown

(2) Continuing education at a higher level

(3) Not available for placement due to other reasons

(4) Working part-time

(5) Working full-time in the field trained

(6) Working full-time in a related field

(7) Working full-time in a non-related field

(8) Unemployed

Students chosen to receive questionnaires were those who the teacher had indicated were either working full time or were unemployed, that is, were assigned code numbers 5 through 8.

A questionnaire was developed and sent by the consultant firm to the target students to be completed and returned to the consultants. Students were asked to give their employment status as of November 10, 1974, the title of their job if employed full time, and a description of the work they did. Teacher and student responses were then compared and percentage deviations computed. Specific tasks involved in completing the study are described below.

A. Getting Support of Target School Personnel

After the Division of Vocational, Technical and Adult Education of the Arkansas State Department of Education selected the school districts to be included in the study, they contacted the superintendent of each school and explained the proposed study to him. The superintendents appointed a contact person in his school district who could be called upon by the consultants to provide information needed to conduct the study.

The consultant called each contact person and explained his part in the study. He further explained that a list of 1974 graduates had been compiled to whom questionnaires were to be mailed, and requested their help in providing mailing address and telephone number for each name on the list. The lists were sent to the respective schools. Contact persons located addresses and telephone numbers and returned the completed mailing lists to the consultant.

B. Developing and Field Testing Questionnaire

A questionnaire was developed to get the desired data. Steps were taken to make the questionnaire short, simple to answer, and easy to return. Consisting of one page, the questionnaire contained a brief letter signed by the principal of each school involved in the study and three questions to be answered by the graduate. The letter explained briefly the purpose of the questionnaire and gave directions for completing and returning the questionnaire.

In the questionnaire the student was asked to indicate his occupational status as of November 10, 1974, the date that coincided with the teachers follow-up report. Students who were working full time were asked to give the title of the job they held and to describe the work they did. The completed questionnaire which was self-addressed and needed no envelope nor postage was then to be refolded and mailed. A copy of the questionnaire is attached as Appendix A.

The first draft of the questionnaire was sent to the Vocational Division of the Arkansas State Department of Education to be critiqued. Suggestions made by personnel in that office were incorporated in a second draft. The questionnaire was then field tested by administering it to recent vocational graduates of Magnolia High School. Since no apparent problems were indicated, questionnaires were prepared for mailing.

C. Sending Out and Collecting Questionnaire Information

Questionnaires were to be sent to all 1974 vocational graduates who teachers indicated were working full time or were unemployed. If the number of students in this category was too large, sampling techniques were to be used.

After eliminating those names on the printout whom teachers had coded 1 through 4 (status unknown, continuing education, not available for employment, or working part time), it was decided that sampling was not necessary, and questionnaires were mailed to all 1974 vocational graduates from the ten target Arkansas high schools. The target group consisted of 441 students.

Approximately one month after the first mailing of questionnaires, the replies by mail had reached only 23 percent of those sent out; 9 percent were returned from the post office undelivered. Since contact persons had provided telephone numbers for most of the graduates, it was decided that a telephone contact would provide much greater opportunity to get the desired information than what would be done through the mail. Therefore a WATS service was installed to complete the questionnaire survey.

When the homes of the graduates were called and parents said that the student was no longer living at home, new addresses were obtained from the parents and a questionnaire was sent to the graduate. However, the majority of the remaining students were contacted by telephone and provided the desired information over the phone.

In some cases parents provided information on the telephone. Before this information was used in the study, Vocational Division personnel were contacted to see if they would accept the information as valid. They determined that if the graduates were living at home and the parent was able to describe the work done by the student on the date in question, the information could be used. This means was used to gather data only when it became apparent that there would be difficulty contacting the graduate personally, for example, when his working hours made reaching him impossible or when after several calls to the same person the consultants were unsuccessful in finding him at home.

When it appeared that all possible contacts had been made, the research team again called upon the contact persons to search for addresses and telephone numbers of the students who had not been located. With the additional addresses and phone numbers, school personnel provided, the consultants brought the total response to the questionnaire mail and telephone survey to 333 or 76 percent of the target group. Table 1 presents information by school on the number of questionnaires mailed, the number and percent of responses received by mail, and the number and percent of responses obtained through telephone contacts. Also shown is the number and percent of students who could not be contacted.

Table 1: A SUMMARY OF THE REPLIES RECEIVED FROM STUDENTS INVOLVED IN THE VOCATIONAL EDUCATION VALIDATION STUDY

School	N	Mail Replies		Telephone Replies		Total Replies		Unable to Contact	
		No.	%	No.	%	No.	%	No.	%
Harrison	45	14	31	19	42	33	73	12	27
Hot Springs	70	17	24	40	57	57	81	13	19
Marianna	39	6	15	22	56	28	72	11	28
Pulaski County:									
Jacksonville	34	8	24	17	50	25	74	9	26
McClellan	76	14	18	41	54	55	72	21	28
Mills	56	12	21	27	48	39	70	17	30
Oak Grove	16	1	6	11	69	12	75	4	25
Robinson	16	4	25	9	56	13	81	3	19
Sylvan Hills	49	16	33	25	51	41	84	8	16
Searcy	40	8	20	22	55	30	75	10	25
TOTAL	441	100	23	233	53	333	76	108	24

The data in Table 1 show that 23 percent of the responses were received by mail and 53 percent were obtained by telephone. Mail replies ranged from 6 to 33 percent among the ten schools, while the telephone responses accounted for 42 to 69 percent of the replies.

The highest percentage of replies came from graduates of Sylvan Hills with 84 percent of the questionnaires completed by mail or phone. Total replies from other schools ranged from 70 to 81 percent. It was not possible to contact 24 percent of the students listed.

D. Analyzing Returned Data

When the questionnaires were returned or were completed by way of a telephone conversation, the job the respondent held as of November 10, 1974 was given a code number from the Dictionary of Occupational Titles (DOT). This is a United States Department of Labor publication. Appropriateness of the number was based on the title of the job together with the kind of work done in the job as the respondent described it.

Next, it was necessary to determine if the reported job was in the same field as the student's occupational training in high school, in a field related to his training, or in a non-related field. This determination was based on data found in the United States Office of Education publication, Vocational Education and Occupations, and in the Dictionary of Occupational Titles.

The publication Vocational Education and Occupations gives a code number for each course taught in high schools. This code number is assigned by the United States Office of Education (OE code number). Following each course number are the course title, a brief course description, and the DOT code numbers of jobs which that course prepares the student to fill. (See Appendix B)

If the six-digit DOT job number was listed in the Vocational Education and Occupation publication among the jobs for which the course prepared the student, the job was considered to be in the same field as the students' training.

When the training code and job code differed, it was necessary to determine if the job was related to the training. This decision was based on using the last three digits of the DOT job code number which represents the worker trait group. If the worker trait group numbers of the student's job matched the worker trait group numbers of any of the DOT numbers of jobs for which the course trained, or if they matched the worker trait group of related job classifications, the job and training were considered to be in related fields. If no three digit numbers were comparable, the student was considered to be working in a field unrelated to the area for which he was trained. For step by step procedures in determining relatedness of job to training see Appendix C.

After the student's employment status was determined, the results from the validation study were then compared to those of the state wide follow-up conducted through the teachers. The findings of the validation study are presented in the following section.

V. FINDINGS

In presenting the findings of the study, the employment status of the 1974 vocational education graduates will be shown for the total group, first, as reported by the teachers and, second, as reported by the students. A comparison of teachers' and students' reports will then be presented for all schools involved in the study and for each school separately. Compared responses will also be shown for each of the six occupational training fields.

A. Employment Status of the 1974 Vocational Education Graduates - For Total Group

1. Teachers' Reports

Students in the target group were those who were reported by teachers to be working full time or unemployed. The teacher indicated if the student's full time employment was in the same field as his training, in a field related to his training, or in a non-related field. Information on the number and percent of students in each employment category reported by teachers is shown in Table 2.

Table 2: THE EMPLOYMENT STATUS OF THE 1974 VOCATIONAL EDUCATION GRADUATES AS REPORTED BY TEACHERS

Employment Status	Number	Percent
Working in same field as training	176	55
Working in field related to training	68	21
Working in field not related to training	54	17
Unemployed	23	7
TOTAL	321	100

According to data in Table 2, teachers reported that over half of the former vocational education students were working in the same field as their training, and an additional 21 percent were working in a field related to their training. In the teachers' opinion, 17 percent of the jobs held by students were in fields not related to their training. They reported 7 percent of the students as unemployed.

2. Students' Reports

In their replies to the questionnaire, the target students gave various indications of their employment status. Some reported that they were working part time, some full time, and others stated that they were unemployed. From the job title and descriptions given, a determination was made by the consulting firm if full time jobs held by students were in the same field as their training, in a related field, or in a non-related field. No determination of relatedness of job to training was made on part-time jobs.

Information on the number and percent of students in each employment category reported by the students themselves is shown in Table 3.

Table 3: THE EMPLOYMENT STATUS OF THE 1974 VOCATIONAL EDUCATION GRADUATES AS REPORTED BY THE STUDENTS

Employment Status	Number	Percent
Working part time	29	9
Working in same field as training	72	22
Working in field related to training	120	37
Working in field not related to training	48	15
Unemployed	52	16
TOTAL	321	100

The information in Table 3 shows that 37 percent of students reported they were working in jobs that were in a field related to their vocational training while 22 percent had full time jobs in the same field as their training. Fifteen percent were working at jobs unrelated to the training they had in high school, while 16 percent reported that they were unemployed. An additional nine percent of the students indicated they were employed part-time.

3. Comparison of Teacher and Student Responses

a. For All Schools

To compare the employment status of the 1974 vocational education graduates as reported by the teachers and by the students themselves, the data revealed by the study were tabulated in matrix form. The number of paired responses is 321. This number is less than the total number of questionnaires returned (333) shown in Table 1. The discrepancy is due to the fact that 12 students took vocational courses of study with general OE instructional code numbers (such as 17.99, 07.99, 14.99) to which no DOT job codes for training could be assigned. Therefore, it was not possible to determine the relatedness of their job to their training, and these replies were dropped from the study.

Table 4 presents the paired responses of teachers and students for the 321 students in the study.

Table 4: A COMPARISON OF TEACHER AND STUDENT RESPONSES CONCERNING THE PRESENT EMPLOYMENT STATUS OF 321 VOCATIONAL EDUCATION GRADUATES IN TEN ARKANSAS HIGH SCHOOLS

Number and Percent of Student Responses

Number and Percent of Teacher Responses	Working Part Time	Working In Same Field as Training	Working in Field Related to Training	Working in field not related to Training	Unemployed	Total Teacher Response
Working Part Time						
Working in Same Field as Training	18 (6%)	54 (17%)	68 (21%)	22 (7%)	14 (4%)	176 (55%)
Working in Field Related to Training	7 (2%)	7 (2%)	25 (8%)	9 (3%)	20 (6%)	68 (21%)
Working in Field Not Related to Training	2 (0%)	7 (2%)	22 (7%)	14 (4%)	9 (3%)	54 (17%)
Unemployed	2 (0%)	4 (1%)	5 (2%)	3 (1%)	9 (3%)	23 (7%)
Total Student Response	29 (9%)	72 (22%)	120 (37%)	48 (15%)	52 (16%)	321 (100%)

Exact Agreement: teacher and student responses are the same

Partial Agreement: teacher reports that student is working in same field but student reports that he is working in a related field, or vice versa.

Non-Agreement: teacher and student responses are completely non-related.

Each compared teacher/student response fell into one of five employment categories heading the columns and rows in Table 4. The five categories are: working part time, working in same field as training, working in field related to training, working in field not related to training, and unemployed.

The horizontal rows show the responses and judgment of the teachers while the vertical columns show the responses made by the students. When these responses are compared, the ▨ squares indicate that teachers' and students' responses are in exact agreement. For example, both teacher and student report that 54 or 17 percent of the students were working in the same field as that in which they were trained. The number of times that both teacher and student reports are in exact agreement can be seen by looking at those cells with similar hatching. The total cases of exact agreement is 102 or 32 percent of the compared responses.

Partial agreement is defined as those cases where the teacher's report indicates that the student is working in the same field but the student's report indicates that he is working in a related field, or vice versa. The frequency of partial agreement can be seen by looking at the cells marked ▩. For example, seven students or two percent reported that they were working in the same field as their training while the teacher reported that these students were working in field related to their training. In the other cell representing partial agreement, 68 or 21 percent of the students reported that they were working in a field related to their training and the teacher reported that they were working in the same field. Thus, a total of 75 responses (23 percent) were considered in partial agreement.

Cells with no hatching represent cases of non-agreement between the student's report and the teacher's report of the student's employment status. The 14 remaining cells reflect areas of non-agreement between teachers and students. Students reported by teachers to be working part-time were not included in the target population. This is reflected in the top row of the matrix which contains no figures. Student reports, on the other, hand, indicate a 9 percent incidence of part-time employment. These same students were reported by teachers to be working, variously, in the same field (6 percent), in a related field (7 percent),

in a non-related field or unemployed (less than 1 percent each). Other areas of non-agreement with a relatively large number of cases were: (1) teachers reported the student working in the same field as his training while the same student reported a job in a field not related to his training and (2) teachers reported the student working in a non-related area while that same student reported a job in a field related to his training. Each of the remaining cells represented 6 percent or less of the cases of non-agreement.

b. By School

Results of the validation study were summarized to show the comparison of teacher and student responses by schools. The data were tabulated in three categories to show various degrees of agreement between the teacher's and student's report of the student's employment status after graduation. The three categories of data presented are: (1) areas in which teacher and student responses are in exact agreement (from cells in Table 4 with diagonal hatching), (2) areas in which the responses are in partial agreement (from cells in Table 4 with dotted hatching), and (3) areas of complete non-agreement (from cells in Table 4 without hatching).

Table 5: A COMPARISON OF TEACHER AND STUDENT RESPONSES CONCERNING EMPLOYMENT STATUS OF VOCATIONAL EDUCATION GRADUATES IN A VALIDATION STUDY BY SCHOOL

School	Total Responses	Areas of Agreement					
		Exact		Partial		Non-	
		No.	%	No.	%	No.	%
Harrison	33	11	33	10	30	12	36
Searcy	30	8	27	6	20	16	53
Marianna	26	7	27	1	4	18	69
Hot Springs	56	15	27	20	36	21	37
Jacksonville	22	8	36	4	18	10	46
Oak Grove	12	5	42	4	33	3	25
Sylvan Hills	41	18	44	7	17	16	39
Robinson	13	3	23	3	23	7	54
Mills	33	10	30	4	12	19	58
McClellan	55	17	31	16	29	22	40
TOTAL	321	102	32	75	23	144	45

The cases of exact agreement between students and teacher responses among the various schools ranged from 23 to 44 percent with most of the schools clustered around the mean of 32. In cases of partial agreement, the range among the schools varied more widely from a low of 4 percent to a high of 34 percent. There was a high incidence of non-agreement of student and teacher reports among all schools. The rate of non-agreement varied from 25 to 69 percent.

B. Comparison of Teacher and Student Responses on the Employment Status of 1974 Vocational Education Graduates - By Occupational Fields

Results of the validation study were analyzed to see if the compared reports of teachers and students varied among the occupational training areas.

Six vocational programs were offered among the ten schools in the study; however, all schools did not offer all programs. Vocational programs offered were office occupations, trade and industrial occupations, distributive education, agriculture, health occupations and home economics. Table 6 presents information on vocational programs offered in each of the ten schools in this study and the number of students involved in each training area from each school.

Table 6: THE VOCATIONAL PROGRAMS OFFERED IN SCHOOLS INVOLVED IN THE VALIDATION STUDY AND THE NUMBER OF STUDENTS IN EACH PROGRAM IN THE STUDY

	Office Occ.	T and I	Distributive Education	Agri-culture	Health Occ.	Home EC	Total
Harrison	11	5	10	3	3	1	33
Hot Springs	16	15	25	--	--	--	56
Marianna	5	14	--	7	--	--	26
Searcy	6	4	7	11	2	--	30
Pulaski Special							
Jacksonville	10	1	6	--	3	2	22
McClellan	27	27	--	--	1	--	55
Mills	21	9	--	--	3	--	33
Oak Grove	4	5	3	--	--	--	12
Robinson	2	11	--	--	--	--	13
Sylvan Hills	14	6	21	--	--	--	41
TOTAL	116	97	72	21	12	3	321

Information presented in Table 6 indicates that Office Occupations and Trade and Inudstrial courses were offered in all ten schools involved in the validation study. Distributive education was offered in seven schools, health occupations in five, agriculture in three and home economics in two. The largest number of vocational education graduates had training in office occupations (36 percent) with the least number in home economics (3%).

Table 7 shows the comparisons of student and teacher responses by area of training in the same manner as previously presented by school (Table 5). That is, teacher and student responses that agree exactly are shown in one column, those that differ only in whether the job and training are related or the same appear in the next column (partial agreement), and responses in non-agreement are shown in the third column.

Table 7: A COMPARISON OF TEACHER AND STUDENT RESPONSES CONCERNING EMPLOYMENT STATUS OF VOCATIONAL EDUCATION GRADUATES IN A VALIDATION STUDY BY OCCUPATIONAL TRAINING AREA

Training Area	Total Responses	Areas of Agreement					
		Exact		Partial		Non-	
		No.	%	No.	%	No.	%
Office Occupations	116	40	34	32	28	44	38
Trade and Industrial	97	24	25	15	15	58	60
Distributive Education	72	25	35	23	32	24	33
Agriculture	21	6	29	3	14	12	57
Health Occupations	12	6	50	2	17	4	33
Home Economics	3	1	33	0	0	2	67
TOTAL	321	102	32	75	23	144	45

Data in the above table show that a high percentage of exact agreement occurred in teacher and student reports on jobs held by health occupations graduates. However, it should be noted that there is only a small number of vocational graduates in this training area in the study. Trade and industrial graduates were in jobs on which the lowest percentage of exact agreements occurred. In other training areas the percentages of exact agreement were close to the mean for all areas.

The comparison of student teacher responses showing partial agreement ranged from 0 to 32 percent.

Training areas with the highest percentage of responses in non-agreement were trade and industrial, agriculture and home economics. (Home economics had only three graduates represented in the study thus affecting the percentages spuriously.)

Tables 8 through 13 present comparisons of the teacher and student responses concerning the employment status of vocational graduates for each of the six occupational areas. Each of the tables will be analyzed to show the extent of exact agreement, partial agreement, or non-agreement between the teachers' and students' responses. To obtain total numbers in these variables, the reader needs to total the figures in each of the cells according to the key at the bottom of the table.

Table 8 presents information concerning the employment status of students who took office occupations courses in high school.

Table 8: A COMPARISON OF TEACHER AND STUDENT RESPONSES CONCERNING THE PRESENT EMPLOYMENT STATUS OF OFFICE OCCUPATIONS GRADUATES IN TEN ARKANSAS HIGH SCHOOLS

Number and Percent of Teacher Responses	Number and Percent of Student Responses: Working Part Time	Working In Same Field as Training	Working in Field Related to Training	Working in field not related to Training	Unemployed	Total Teacher Response
Working Part Time						
Working in Same Field as Training	9 (8%)	23 (20%)	30 (26%)	9 (8%)	8 (7%)	79 (68%)
Working in Field Related to Training	5 (4%)	2 (2%)	10 (9%)	3 (3%)	1 (1%)	21 (18%)
Working in Field Not Related to Training		1 (1%)		3 (3%)	4 (3%)	8 (7%)
Unemployed		2 (2%)	1 (1%)	1 (1%)	4 (3%)	8 (7%)
Total Student Response	14 (12%)	28 (24%)	41 (35%)	16 (14%)	17 (15%)	116 (100%)

Exact Agreement: teacher and student responses are the same

Partial Agreement: teacher reports that student is working in same field but student reports that he is working in a related field, or vice versa.

Non-Agreement: teacher and student responses are completely non-related.

Information in the table shows that office occupations teachers and students were in exact agreement on the classification of 40 or 35 percent of the 116 jobs held by graduates. In an additional 32 jobs (28 percent) they were in partial agreement. Non-agreement ranged from 1 to 8 percent. Most disagreement occurred in cases where teachers reported students to be working in the same field as their training but from the student's report the jobs were classified as part-time, unrelated to the training or unemployed.

Table 9 compares student and teacher responses pertaining to the employment status of trade and industrial graduates.

Table 9: A COMPARISON OF TEACHER AND STUDENT RESPONSES CONCERNING THE PRESENT EMPLOYMENT STATUS TRADE AND INDUSTRIAL GRADUATES IN TEN ARKANSAS HIGH SCHOOLS

Number and Percent of Student Responses

Number and Percent of Teacher Responses	Working Part Time	Working In Same Field as Training	Working in Field Related to Training	Working in field not related to Training	Unemployed	Total Teacher Response
Working Part Time						
Working in Same Field as Training	6 (6%)	14 (14%)	13 (13%)	5 (5%)	2 (2%)	40 (41%)
Working in Field Related to Training	1 (1%)	2 (2%)	6 (6%)	3 (3%)	11 (11%)	23 (24%)
Working in Field Not Related to Training	2 (2%)	4 (4%)	14 (14%)	1 (1%)	4 (4%)	25 (26%)
Unemployed	2 (2%)	1 (1%)	3 (3%)		3 (3%)	9 (9%)
Total Student Response	11 (11%)	21 (22%)	36 (37%)	9 (9%)	20 (21%)	97 (100%)

Exact Agreement: teacher and student responses are the same

Partial Agreement: teacher reports that student is working in same field but student reports that he is working in a related field, or vice versa.

Non-Agreement: teacher and student responses are completely non-related.

Data in Table 9 show that 24 or 24 percent of the paired responses of trade and industrial teachers and students were in agreement and another 15 or 15 percent were in partial agreement. Non-agreement occurred in 61 percent of the cases and were predominately in two areas: (1) the teacher reported that the student was working in a field not related to his training while the student's report was considered to be in a related field, and (2) the teacher reported that the student was working in a related field but the student reported that he was unemployed.

Table 10 presents data on the employment status of distributive education graduates as reported by teachers and by students.

Table 10: A COMPARISON OF TEACHER AND STUDENT RESPONSES CONCERNING THE PRESENT EMPLOYMENT STATUS OF DISTRIBUTIVE EDUCATION GRADUATES IN SEVEN ARKANSAS HIGH SCHOOLS

Number and Percent of Student Responses

Number and Percent of Teacher Responses	Working Part Time	Working In Same Field as Training	Working in Field Related to Training	Working in field not related to Training	Unemployed	Total Teacher Response
Working Part Time						
Working in Same Field as Training	1 (1%)	12 (17%)	20 (28%)	4 (6%)	1 (1%)	38 (53%)
Working in Field Related to Training	1 (1%)	3 (4%)	3 (4%)	2 (3%)	4 (6%)	13 (18%)
Working in Field Not Related to Training		2 (3%)	7 (10%)	9 (13%)		18 (25%)
Unemployed		1 (1%)		1 (1%)	1 (1%)	3 (4%)
Total Student Response	2 (3%)	18 (25%)	30 (42%)	16 (22%)	6 (8%)	72 (100%)

Exact Agreement: teacher and student responses are the same

Partial Agreement: teacher reports that student is working in same field but student reports that he is working in a related field, or vice versa.

Non-Agreement: teacher and student responses are completely non-related.

Teacher and student reports of the employment status of former distributive education students were alike in 24 cases (35 percent). Twenty-three comparisons (32 percent) were in partial agreement. Thirty-three percent of the responses were in non-agreement and the greatest area of non-agreement between teachers and students was in cases where teachers reported that jobs were in fields not related to training but students' reports indicated that they were in related fields (10 percent).

Comparisons of teacher and student responses of employment status of students trained in agriculture are presented in Table 11.

Table 11: A COMPARISON OF TEACHER AND STUDENT RESPONSES CONCERNING THE PRESENT EMPLOYMENT STATUS OF AGRICULTURE GRADUATES IN THREE ARKANSAS HIGH SCHOOLS

Number and Percent of Student Responses

Number and Percent of Teacher Responses	Working Part Time	Working In Same Field as Training	Working in Field Related to Training	Working in field not related to Training	Unemployed	Total Teacher Response
Working Part Time						
Working in Same Field as Training	2 (10%)	2 (10%)	3 (14%)	1 (5%)	2 (10%)	10 (48%)
Working in Field Related to Training			4 (19%)	1 (5%)	2 (10%)	7 (33%)
Working in Field Not Related to Training			1 (5%)		1 (5%)	2 (10%)
Unemployed			1 (5%)	1 (5%)		2 (10%)
Total Student Response	2 (10%)	2 (10%)	9 (43%)	3 (14%)	5 (24%)	21 (100%)

Exact Agreement: teacher and student responses are the same

Partial Agreement: teacher reports that student is working in same field but student reports that he is working in a related field, or vice versa.

Non-Agreement: teacher and student responses are completely non-related.

According to data in Table 11, agriculture students and teachers agreed on the employment status of 6 of the 21 graduates in the study (29 percent) and agreed partially on another 3 graduates (14 percent). The highest percent of disagreement (10 percent) occurred when teachers reported that jobs were in the same or related field and the students' report indicated that they were working part time or unemployed as of November 10, 1974.

Information on health occupations graduates is shown in Table 12.

Table 12: A COMPARISON OF TEACHER AND STUDENT RESPONSES CONCERNING THE PRESENT EMPLOYMENT STATUS OF HEALTH OCCUPATIONS GRADUATES IN FIVE ARKANSAS HIGH SCHOOLS

Number and Percent of Student Responses

Number and Percent of Teacher Responses	Working Part Time	Working In Same Field as Training	Working in Field Related to Training	Working in field not related to Training	Unemployed	Total Teacher Response
Working Part Time						
Working in Same Field as Training		3 (25%)	2 (17%)	2 (17%)		7 (58%)
Working in Field Related to Training			2 (17%)		2 (17%)	4 (33%)
Working in Field Not Related to Training				1 (8%)		1 (8%)
Unemployed						
Total Student Response		3 (25%)	4 (33%)	3 (25%)	2 (17%)	12 (100%)

Exact Agreement: teacher and student responses are the same

Partial Agreement: teacher reports that student is working in same field but student reports that he is working in a related field, or vice versa.

Non-Agreement: teacher and student responses are completely non-related.

Data in Table 12 show that health occupations teachers' and students' reports of employment status were in exact agreement in 50 percent of the cases and in partial agreement in another 17 percent of the cases. Non-agreement appeared when teachers reported that students were working in the same field as their training but students' reports showed that they were working in fields not related to their training or were unemployed.

The data in Table 13 pertains to the three home economics graduates in the study. In one of the three cases, teachers and students both reported that the student was unemployed. In the two remaining cases teachers reported that the student was working in the same field as his training but one student reported that he was unemployed at the time in question and the other student's report showed that he was working in a field unrelated to his training.

Table 13: A COMPARISON OF TEACHER AND STUDENT RESPONSES CONCERNING THE PRESENT EMPLOYMENT STATUS OF HOME ECONOMICS GRADUATES IN TWO ARKANSAS HIGH SCHOOLS

Number and Percent of Student Responses

Number and Percent of Teacher Responses	Working Part Time	Working In Same Field as Training	Working in Field Related to Training	Working in field not related to Training	Unemployed	Total Teacher Response
Working Part Time						
Working in Same Field as Training				1 (33%)	1 (33%)	2 (67%)
Working in Field Related to Training						
Working in Field Not Related to Training						
Unemployed					1 (33%)	1 (33%)
Total Student Response				1 (33%)	2 (67%)	3 (100%)

Exact Agreement: teacher and student responses are the same

Partial Agreement: teacher reports that student is working in same field but student reports that he is working in a related field, or vice versa.

Non-Agreement: teacher and student responses are completely non-related.

VI. SUMMARY OF MAJOR FINDINGS

A. The teachers reported that 55 percent of the 1974 vocational education graduates were working in the same field as the area in which they had high school training. Another 21 percent of the graduates were working in fields related to their training, the teachers reported.

B. When a consultant firm classified the employment status of students as reported by students themselves, it was found that 22 percent of the 1974 vocational education graduates were working in the same field as the area in which they had high school training. Another 37 percent were working in fields related to their training.

C. When the employment status of 1974 vocational education graduates as reported by teachers were compared with employment status as reported by students and classified by a consultant firm, it was found that there was exact agreement in 32 percent of the cases and partial agreement in an additional 23 percent of the cases. In 45 percent of the cases there was non-agreement.

D. In the 45 percent of the cases where teacher and student responses were in non-agreement, the following major discrepancies were noted.

1. The teachers reported that 27 students were working full time and two students were unemployed. These same students were working part time according to reports of students. This constituted 9 percent of the total group.

2. The teachers reported that 22 students were working in the same field as their high school training. These same students were working in a field not related to their high school training according to the report of students and as classified by the consultant firm. This constituted 7 percent of the total group.

3. The teachers reported that another 22 students were working in fields not related to their high school training. These same students were working in a field related to their high school training according to the reports of students and as classified by the consultant firm. This constitutes 7 percent of the total group.

E. The students' and teachers' responses in the Marianna School District had the highest rate (69 percent) of non-agreement while the students' and teachers' responses from Oak Grove High School had the smallest rate (25 percent) of non-agreement.

F. Of the 321 students studied, 116 or 36 percent had high school training in office occupations. Nearly 89 percent of all the students involved in the study had high school training in the fields of office occupations, trade and industries, and distributive education.

G. When the employment status of graduates as reported by teachers and students were compared and analyzed by occupational fields, it was found that:

1. the highest rate of exact agreement responses (55 percent) was in the health occupation field. The lowest rate of exact agreement responses (25 percent) was in the trade and industry field.

2. the highest rate of partial agreement responses (32 percent) was in the distributive education field. The lowest rate of partial agreement responses (14 percent) was in the agricultural field.

3. the highest rate of non-agreement responses (67 percent) was in the home economics field. The lowest rate of non-agreement responses (33 percent) was in the distributive education and health occupations fields.

VII. CONCLUSIONS

A. The majority of the 1974 vocational education graduates were working in an occupation in the same or a related field to the area in which they had high school training.

B. A wide discrepancy exists between the teacher's report and the student's report of the student's employment status six months after graduation from high school.

C. The discrepancy between the teacher's report and the student's report of the student's employment status cannot be wholly attributed to differences in ways the teachers and the consultants classified students' employment status as 22 percent of the students reported by teachers to be working full time were found to be working part time or were unemployed.

D. The accuracy of the teacher reports of the employment status of the vocational graduates varied greatly among the schools participating in the study as indicated by the percentage of non-agreement between teacher and student's report.

E. The high school students in Arkansas primarily take vocational education training in three occupational fields: office occupations, trade and industries; and distributive education.

F. There is considerable variation in reports of employment status from one occupational field to another as the highest rate of non-agreement between students and teachers occurred in the home economics field (67 percent) while the lowest rate of non-agreement was in the distributive education field (33 percent).

VIII. RECOMMENDATIONS

A. It is recommended that definitions of relatedness between job and training be established and communicated to teachers so that a standard system of coding employment categories can be used by all persons involved in reporting student follow-up.

B. An alternative follow-up system might be to require teachers to contact student or parent and obtain the student's job title, employer, and brief description of work. This information could be submitted to a central agency who would determine the relatedness of the job to the training.

C. To encourage greater cooperation and higher rate of response, it is recommended that senior vocational students be told of the follow-up, its purpose, importance and expected date before they graduate from school.

D. If the teachers continue to submit data without student or parent contact, it is recommended that validation studies be conducted every three years.

APPENDIX A

Dear Former Student:

We at High School are trying to find out what our vocational education graduates are doing. This information will help us make changes in our courses that will better prepare our students for the world of work.

Will you please complete the questionnaire below in the space provided. Then refold the questionnaire so that the return address is on the outside and mail it to Educational Planning and Evaluation Services, who are tabulating our data. No stamp or envelope is required.

Your assistance and prompt reply will be greatly appreciated.

Sincerely yours,

Principal

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1. What was your employment status as of November 10, 1974?

_____ Full Time

_____ Part Time

_____ Unemployed

IF YOU WERE WORKING FULL-TIME, COMPLETE THE REMAINING QUESTIONS. IF YOU WERE WORKING PART-TIME OR WERE UNEMPLOYED, REFOLD THE QUESTIONNAIRE AND RETURN.

2. What was the title of the job you held as of November 10, 1974? (Such as sales clerk, nurse's aide, mechanic, stenographer, auto body repairman, draftsman, carpenter, beautician, maid, dental assistant, etc.)

_____

_____

3. Describe briefly the work you did in the job you held as of November 10, 1974.

_____

_____

_____

APPENDIX B

U.S. OFFICE OF EDUCATION CLASSIFICATION		DICTIONARY OF OCCUPATIONAL TITLES			
				Worker Trait Groups (Vol. II)	
Code	Instructional program	Code	Occupational Title (Vol. I)	Page	Title
14.05	MATERIALS SUPPORT OCCUPATIONS (TRANSPORTING, STORING, AND RECORDING) Planned learning activities which include a combination of courses and practical experiences concerned with (1) receiving, storing, issuing, shipping, requisitioning, and accounting for stores of material or material in use; (2) assigning locations and space to items, including verification of quality, identification, condition, and value; (3) preparing or committing stocks for shipment; (4) inventorying stock; (5) replenishing depleted items; and (6) filling orders and issuing tools, equipment, or materials to workers.				
14.0501	PLANNING AND PRODUCTION CLERKS Programs concerned with routing parts for fabricating operations or repairs, developing work plans prior to production, scheduling work for and delivering parts to avoid overproduction, compiling records and reports on the number and types of units produced, and scheduling shipment of parts.	221.138-014	YIELDS SUPERVISOR (clerical)	243	Super. Wk. (Clerical & Rel.)
		221.168-010	MATERIAL COORDINATOR (any ind.)	261	Sched., Exped. & Rel. Wk.
		221.168-018	PRODUCTION COORDINATOR (clerical)	261	" " " " "
		221.168-026	SPARES SCHEDULER (clerical)	261	" " " " "
		221.388-030	INDUSTRIAL-ORDER BREAK-DOWN CLERK (any ind.)	280	Comput. & Rel. Record.
		221.388-042	ORDER DETAILER (clerical)	276	Classif., Filing, & Rel. Wk
		221.388-054	PRODUCTION CLERK (clerical) II	280	Comput. & Rel. Record.
		221.388-074	WORK-ORDER CLERK (clerical) II	276	Classif., Filing, & Rel. Wk
		221.588-022	JOB TRACER (clerical)	289	Routine Check. & Record.
14.0502	QUALITY CONTROL CLERKS Programs concerned with verification of quality and quantity specifications.	168.288-014	CLAIM EXAMINER (insurance) I	234	Title & Contr. Search & Rel
		209.388-014	CAR CHECKER (clerical)	289	Routine Check. & Record.
		209.588-034	RETURN-TO-FACTORY CLERK (clerical)	289	" " " "
		209.688-026	METAL-RELEASE MAN (nonfer. metal alloys)	289	" " " "
		229.588-014	FILE-ROOM CUSTODIAN-AND-STABILITY-PROGRAM CLERK (clerical)	289	" " " "
		229.884-010	CHART CHANGER	322	Manipulating
14.0503	SHIPPING AND RECEIVING CLERKS Programs concerned with assembling, packing, addressing, stamping or receiving, unpacking, verifying, and recording incoming merchandise or materials.	222.138-022	RATE SUPERVISOR (clerical)	243	Super. Wk. (Clerical & Rel.
		222.138-026	SHIPPING CLERK (clerical) I	243	" " " " "
		222.368-014	EXPEDITOR (clerical) I	265	Facil., Ser., & Exped. Wk.
		222.387-018	RECEIVING CLERK (clerical)	271	Inspect. & Stock Check.
		222.387-022	RETURNED-GOODS RECEIVING-CLERK (clerical)	271	" " " "

APPENDIX C

RULES FOR DETERMINING RELATEDNESS OF JOB TO VOCATIONAL TRAINING

1. Look up the student's job in Volume I of the Dictionary of Occupational Titles and find the six digit code number for the job.

2. Look in the Office of Education publication Vocational Education and Occupations and find the code number for the student's high school instructional program. Following each training program are the DOT code numbers of jobs which that program prepares the student to fill.

3. If the student's six digit DOT job number is listed, the student is working in the same area for which he was trained.

4. If the student's DOT job number and training code differ, look at the last three digits of the DOT job code number which represents the worker trait group.

5. Look to see if the three digit worker trait code is listed under the instructional program code number. If it is, the student is working in a related area in the field for which he was trained.

6. If the three digit code is not listed under the instructional program code number, look in Volume II of the Dictionary of Occupational Titles for related job classification code numbers. (page listed after DOT number and job title in Part II of Vocational Education and Occupations) List the three digit worker trait codes for the related jobs.

7. Look to see if any of the related three digit worker trait codes are the same as the student's worker trait code number. If it is, the student is working in a related area to the field for which he was trained.

8. If no three-digit numbers are comparable, the student is working in a field unrelated to the area for which he was trained.